

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: \_\_\_\_\_

Source: \_\_\_\_\_

Date Processed by STIC: \_\_\_\_\_

09/859,722A

IFW16

11/09/2006

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 11/09/2006

PATENT APPLICATION: US/09/859,722A

TIME: 08:56:59

Input Set : A:\16163-004001.txt

Output Set: N:\CRF4\11092006\I859722A.raw

4 <110> APPLICANT: Somers, William Stuart  
 5 Tang, Jin  
 6 Camphausen, Raymond  
 7 Seehra, Jasbir  
 9 <120> TITLE OF INVENTION: CRYSTAL STRUCTURES OF P-SELECTIN, P- AND E-SELECTIN  
 COMPLEXES,  
 10 AND USES THEREOF  
 13 <130> FILE REFERENCE: 16163-004001  
 15 <140> CURRENT APPLICATION NUMBER: US 09/859,722A  
 16 <141> CURRENT FILING DATE: 2001-05-17  
 18 <150> PRIOR APPLICATION NUMBER: US 60/205,875  
 19 <151> PRIOR FILING DATE: 2000-05-19  
 21 <160> NUMBER OF SEQ ID NOS: 10  
 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 25 <210> SEQ ID NO: 1  
 26 <211> LENGTH: 830  
 27 <212> TYPE: PRT  
 28 <213> ORGANISM: Homo sapiens  
 30 <400> SEQUENCE: 1  
 31 Met Ala Asn Cys Gln Ile Ala Ile Leu Tyr Gln Arg Phe Gln Arg Val  
 32 1 5 10 15  
 33 Val Phe Gly Ile Ser Gln Leu Leu Cys Phe Ser Ala Leu Ile Ser Glu  
 34 20 25 30  
 35 Leu Thr Asn Gln Lys Glu Val Ala Ala Trp Thr Tyr His Tyr Ser Thr  
 36 35 40 45  
 37 Lys Ala Tyr Ser Trp Asn Ile Ser Arg Lys Tyr Cys Gln Asn Arg Tyr  
 38 50 55 60  
 39 Thr Asp Leu Val Ala Ile Gln Asn Lys Asn Glu Ile Asp Tyr Leu Asn  
 40 65 70 75 80  
 41 Lys Val Leu Pro Tyr Tyr Ser Ser Tyr Tyr Trp Ile Gly Ile Arg Lys  
 42 85 90 95  
 43 Asn Asn Lys Thr Trp Thr Trp Val Gly Thr Lys Lys Ala Leu Thr Asn  
 44 100 105 110  
 45 Glu Ala Glu Asn Trp Ala Asp Asn Glu Pro Asn Asn Lys Arg Asn Asn  
 46 115 120 125  
 47 Glu Asp Cys Val Glu Ile Tyr Ile Lys Ser Pro Ser Ala Pro Gly Lys  
 48 130 135 140  
 49 Trp Asn Asp Glu His Cys Leu Lys Lys Lys His Ala Leu Cys Tyr Thr  
 50 145 150 155 160  
 51 Ala Ser Cys Gln Asp Met Ser Cys Ser Lys Gln Gly Glu Cys Leu Glu  
 52 165 170 175  
 53 Thr Ile Gly Asn Tyr Thr Cys Ser Cys Tyr Pro Gly Phe Tyr Gly Pro  
 54 180 185 190  
 55 Glu Cys Glu Tyr Val Arg Glu Cys Gly Glu Leu Glu Leu Pro Gln His

(pg-6)

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Input Set : A:\16163-004001.txt

Output Set: N:\CRF4\11092006\I859722A.raw

```

56          195          200          205
57 Val Leu Met Asn Cys Ser His Pro Leu Gly Asn Phe Ser Phe Asn Ser
58          210          215          220
59 Gln Cys Ser Phe His Cys Thr Asp Gly Tyr Gln Val Asn Gly Pro Ser
60 225          230          235          240
61 Lys Leu Glu Cys Leu Ala Ser Gly Ile Trp Thr Asn Lys Pro Pro Gln
62          245          250          255
63 Cys Leu Ala Ala Gln Cys Pro Pro Leu Lys Ile Pro Glu Arg Gly Asn
64          260          265          270
65 Met Ile Cys Leu His Ser Ala Lys Ala Phe Gln His Gln Ser Ser Cys
66          275          280          285
67 Ser Phe Ser Cys Glu Glu Gly Phe Ala Leu Val Gly Pro Glu Val Val
68          290          295          300
69 Gln Cys Thr Ala Ser Gly Val Trp Thr Ala Pro Ala Pro Val Cys Lys
70 305          310          315          320
71 Ala Val Gln Cys Gln His Leu Glu Ala Pro Ser Glu Gly Thr Met Asp
72          325          330          335
73 Cys Val His Pro Leu Thr Ala Phe Ala Tyr Gly Ser Ser Cys Lys Phe
74          340          345          350
75 Glu Cys Gln Pro Gly Tyr Arg Val Arg Gly Leu Asp Met Leu Arg Cys
76          355          360          365
77 Ile Asp Ser Gly His Trp Ser Ala Pro Leu Pro Thr Cys Glu Ala Ile
78          370          375          380
79 Ser Cys Glu Pro Leu Glu Ser Pro Val His Gly Ser Met Asp Cys Ser
80 385          390          395          400
81 Pro Ser Leu Arg Ala Phe Gln Tyr Asp Thr Asn Cys Ser Phe Arg Cys
82          405          410          415
83 Ala Glu Gly Phe Met Leu Arg Gly Ala Asp Ile Val Arg Cys Asp Asn
84          420          425          430
85 Leu Gly Gln Trp Thr Ala Pro Ala Pro Val Cys Gln Ala Leu Gln Cys
86          435          440          445
87 Gln Asp Leu Pro Val Pro Asn Glu Ala Arg Val Asn Cys Ser His Pro
88          450          455          460
89 Phe Gly Ala Phe Arg Tyr Gln Ser Val Cys Ser Phe Thr Cys Asn Glu
90 465          470          475          480
91 Gly Leu Leu Leu Val Gly Ala Ser Val Leu Gln Cys Leu Ala Thr Gly
92          485          490          495
93 Asn Trp Asn Ser Val Pro Pro Glu Cys Gln Ala Ile Pro Cys Thr Pro
94          500          505          510
95 Leu Leu Ser Pro Gln Asn Gly Thr Met Thr Cys Val Gln Pro Leu Gly
96          515          520          525
97 Ser Ser Ser Tyr Lys Ser Thr Cys Gln Phe Ile Cys Asp Glu Gly Tyr
98          530          535          540
99 Ser Leu Ser Gly Pro Glu Arg Leu Asp Cys Thr Arg Ser Gly Arg Trp
100 545          550          555          560
101 Thr Asp Ser Pro Pro Met Cys Glu Ala Ile Lys Cys Pro Glu Leu Phe
102          565          570          575
103 Ala Pro Glu Gln Gly Ser Leu Asp Cys Ser Asp Thr Arg Gly Glu Phe
104          580          585          590

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Input Set : A:\16163-004001.txt

Output Set: N:\CRF4\11092006\I859722A.raw

```

105 Asn Val Gly Ser Thr Cys His Phe Ser Cys Asn Asn Gly Phe Lys Leu
106      595      600      605
107 Glu Gly Pro Asn Asn Val Glu Cys Thr Thr Ser Gly Arg Trp Ser Ala
108      610      615      620
109 Thr Pro Pro Thr Cys Lys Gly Ile Ala Ser Leu Pro Thr Pro Gly Leu
110 625      630      635      640
111 Gln Cys Pro Ala Leu Thr Thr Pro Gly Gln Gly Thr Met Tyr Cys Arg
112      645      650      655
113 His His Pro Gly Thr Phe Gly Phe Asn Thr Thr Cys Tyr Phe Gly Cys
114      660      665      670
115 Asn Ala Gly Phe Thr Leu Ile Gly Asp Ser Thr Leu Ser Cys Arg Pro
116      675      680      685
117 Ser Gly Gln Trp Thr Ala Val Thr Pro Ala Cys Arg Ala Val Lys Cys
118      690      695      700
119 Ser Glu Leu His Val Asn Lys Pro Ile Ala Met Asn Cys Ser Asn Leu
120 705      710      715      720
121 Trp Gly Asn Phe Ser Tyr Gly Ser Ile Cys Ser Phe His Cys Leu Glu
122      725      730      735
123 Gly Gln Leu Leu Asn Gly Ser Ala Gln Thr Ala Cys Gln Glu Asn Gly
124      740      745      750
125 His Trp Ser Thr Thr Val Pro Thr Cys Gln Ala Gly Pro Leu Thr Ile
126      755      760      765
127 Gln Glu Ala Leu Thr Tyr Phe Gly Gly Ala Val Ala Ser Thr Ile Gly
128      770      775      780
129 Leu Ile Met Gly Gly Thr Leu Leu Ala Leu Leu Arg Lys Arg Phe Arg
130 785      790      795      800
131 Gln Lys Asp Asp Gly Lys Cys Pro Leu Asn Pro His Ser His Leu Gly
132      805      810      815
133 Thr Tyr Gly Val Phe Thr Asn Ala Ala Phe Asp Pro Ser Pro
134      820      825      830
137 <210> SEQ ID NO: 2
138 <211> LENGTH: 610
139 <212> TYPE: PRT
140 <213> ORGANISM: Homo sapiens
142 <400> SEQUENCE: 2
143 Met Ile Ala Ser Gln Phe Leu Ser Ala Leu Thr Leu Val Leu Leu Ile
144 1      5      10      15
145 Lys Glu Ser Gly Ala Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr
146      20      25      30
147 Tyr Asp Glu Ala Ser Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val
148      35      40      45
149 Ala Ile Gln Asn Lys Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Ser
150      50      55      60
151 Tyr Ser Pro Ser Tyr Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val
152 65      70      75      80
153 Trp Val Trp Val Gly Thr Gln Lys Pro Leu Thr Glu Glu Ala Lys Asn
154      85      90      95
155 Trp Ala Pro Gly Glu Pro Asn Asn Arg Gln Lys Asp Glu Asp Cys Val
156      100      105      110

```

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TIME: 08:56:59

Input Set : A:\16163-004001.txt

Output Set: N:\CRF4\11092006\I859722A.raw

```

157 Glu Ile Tyr Ile Lys Arg Glu Lys Asp Val Gly Met Trp Asn Asp Glu
158      115      120      125
159 Arg Cys Ser Lys Lys Lys Leu Ala Leu Cys Tyr Thr Ala Ala Cys Thr
160      130      135      140
161 Asn Thr Ser Cys Ser Gly His Gly Glu Cys Val Glu Thr Ile Asn Asn
162 145      150      155      160
163 Tyr Thr Cys Lys Cys Asp Pro Gly Phe Ser Gly Leu Lys Cys Glu Gln
164      165      170      175
165 Ile Val Asn Cys Thr Ala Leu Glu Ser Pro Glu His Gly Ser Leu Val
166      180      185      190
167 Cys Ser His Pro Leu Gly Asn Phe Ser Tyr Asn Ser Ser Cys Ser Ile
168      195      200      205
169 Ser Cys Asp Arg Gly Tyr Leu Pro Ser Ser Met Glu Thr Met Gln Cys
170      210      215      220
171 Met Ser Ser Gly Glu Trp Ser Ala Pro Ile Pro Ala Cys Asn Val Val
172 225      230      235      240
173 Glu Cys Asp Ala Val Thr Asn Pro Ala Asn Gly Phe Val Glu Cys Phe
174      245      250      255
175 Gln Asn Pro Gly Ser Phe Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys
176      260      265      270
177 Glu Glu Gly Phe Glu Leu Met Gly Ala Gln Ser Leu Gln Cys Thr Ser
178      275      280      285
179 Ser Gly Asn Trp Asp Asn Glu Lys Pro Thr Cys Lys Ala Val Thr Cys
180      290      295      300
181 Arg Ala Val Arg Gln Pro Gln Asn Gly Ser Val Arg Cys Ser His Ser
182 305      310      315      320
183 Pro Ala Gly Glu Phe Thr Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu
184      325      330      335
185 Glu Gly Phe Met Leu Gln Gly Pro Ala Gln Val Glu Cys Thr Thr Gln
186      340      345      350
187 Gly Gln Trp Thr Gln Gln Ile Pro Val Cys Glu Ala Phe Gln Cys Thr
188      355      360      365
189 Ala Leu Ser Asn Pro Glu Arg Gly Tyr Met Asn Cys Leu Pro Ser Ala
190      370      375      380
191 Ser Gly Ser Phe Arg Tyr Gly Ser Ser Cys Glu Phe Ser Cys Glu Gln
192 385      390      395      400
193 Gly Phe Val Leu Lys Gly Ser Lys Arg Leu Gln Cys Gly Pro Thr Gly
194      405      410      415
195 Glu Trp Asp Asn Glu Lys Pro Thr Cys Glu Ala Val Arg Cys Asp Ala
196      420      425      430
197 Val His Gln Pro Pro Lys Gly Leu Val Arg Cys Ala His Ser Pro Ile
198      435      440      445
199 Gly Glu Phe Thr Tyr Lys Ser Ser Cys Ala Phe Ser Cys Glu Glu Gly
200      450      455      460
201 Phe Glu Leu Tyr Gly Ser Thr Gln Leu Glu Cys Thr Ser Gln Gly Gln
202 465      470      475      480
203 Trp Thr Glu Glu Val Pro Ser Cys Gln Val Val Lys Cys Ser Ser Leu
204      485      490      495
205 Ala Val Pro Gly Lys Ile Asn Met Ser Cys Ser Gly Glu Pro Val Phe

```

## RAW SEQUENCE LISTING

DATE: 11/09/2006

PATENT APPLICATION: US/09/859,722A

TIME: 08:56:59

Input Set : A:\16163-004001.txt

Output Set: N:\CRF4\11092006\I859722A.raw

```

206          500          505          510
207 Gly Thr Val Cys Lys Phe Ala Cys Pro Glu Gly Trp Thr Leu Asn Gly
208          515          520          525
209 Ser Ala Ala Arg Thr Cys Gly Ala Thr Gly His Trp Ser Gly Leu Leu
210          530          535          540
211 Pro Thr Cys Glu Ala Pro Thr Glu Ser Asn Ile Pro Leu Val Ala Gly
212 545          550          555          560
213 Leu Ser Ala Ala Gly Leu Ser Leu Leu Thr Leu Ala Pro Phe Leu Leu
214          565          570          575
215 Trp Leu Arg Lys Cys Leu Arg Lys Ala Lys Lys Phe Val Pro Ala Ser
216          580          585          590
217 Ser Cys Gln Ser Leu Glu Ser Asp Gly Ser Tyr Gln Lys Pro Ser Tyr
218          595          600          605
219 Ile Leu
220          610
223 <210> SEQ ID NO: 3
224 <211> LENGTH: 412
225 <212> TYPE: PRT
226 <213> ORGANISM: Homo sapiens
228 <400> SEQUENCE: 3
229 Met Pro Leu Gln Leu Leu Leu Leu Leu Ile Leu Leu Gly Pro Gly Asn
230 1          5          10          15
231 Ser Leu Gln Leu Trp Asp Thr Trp Ala Asp Glu Ala Glu Lys Ala Leu
232          20          25          30
233 Gly Pro Leu Leu Ala Arg Asp Arg Arg Gln Ala Thr Glu Tyr Glu Tyr
234          35          40          45
235 Leu Asp Tyr Asp Phe Leu Pro Glu Thr Glu Pro Pro Glu Met Leu Arg
236          50          55          60
237 Asn Ser Thr Asp Thr Thr Pro Leu Thr Gly Pro Gly Thr Pro Glu Ser
238 65          70          75          80
239 Thr Thr Val Glu Pro Ala Ala Arg Arg Ser Thr Gly Leu Asp Ala Gly
240          85          90          95
241 Gly Ala Val Thr Glu Leu Thr Thr Glu Leu Ala Asn Met Gly Asn Leu
242          100          105          110
243 Ser Thr Asp Ser Ala Ala Met Glu Ile Gln Thr Thr Gln Pro Ala Ala
244          115          120          125
245 Thr Glu Ala Gln Thr Thr Gln Pro Val Pro Thr Glu Ala Gln Thr Thr
246          130          135          140
247 Pro Leu Ala Ala Thr Glu Ala Gln Thr Thr Arg Leu Thr Ala Thr Glu
248 145          150          155          160
249 Ala Gln Thr Thr Pro Leu Ala Ala Thr Glu Ala Gln Thr Thr Pro Pro
250          165          170          175
251 Ala Ala Thr Glu Ala Gln Thr Thr Gln Pro Thr Gly Leu Glu Ala Gln
252          180          185          190
253 Thr Thr Ala Pro Ala Ala Met Glu Ala Gln Thr Thr Ala Pro Ala Ala
254          195          200          205
255 Met Glu Ala Gln Thr Thr Pro Pro Ala Ala Met Glu Ala Gln Thr Thr
256          210          215          220
257 Gln Thr Thr Ala Met Glu Ala Gln Thr Thr Ala Pro Glu Ala Thr Glu

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/859,722A

DATE: 11/09/2006  
TIME: 08:57:00

Input Set : A:\16163-004001.txt  
Output Set: N:\CRF4\11092006\I859722A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:10; Xaa Pos. 2,5

**VERIFICATION SUMMARY**

DATE: 11/09/2006

PATENT APPLICATION: US/09/859,722A

TIME: 08:57:00

Input Set : A:\16163-004001.txt

Output Set: N:\CRF4\11092006\I859722A.raw

L:446 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0